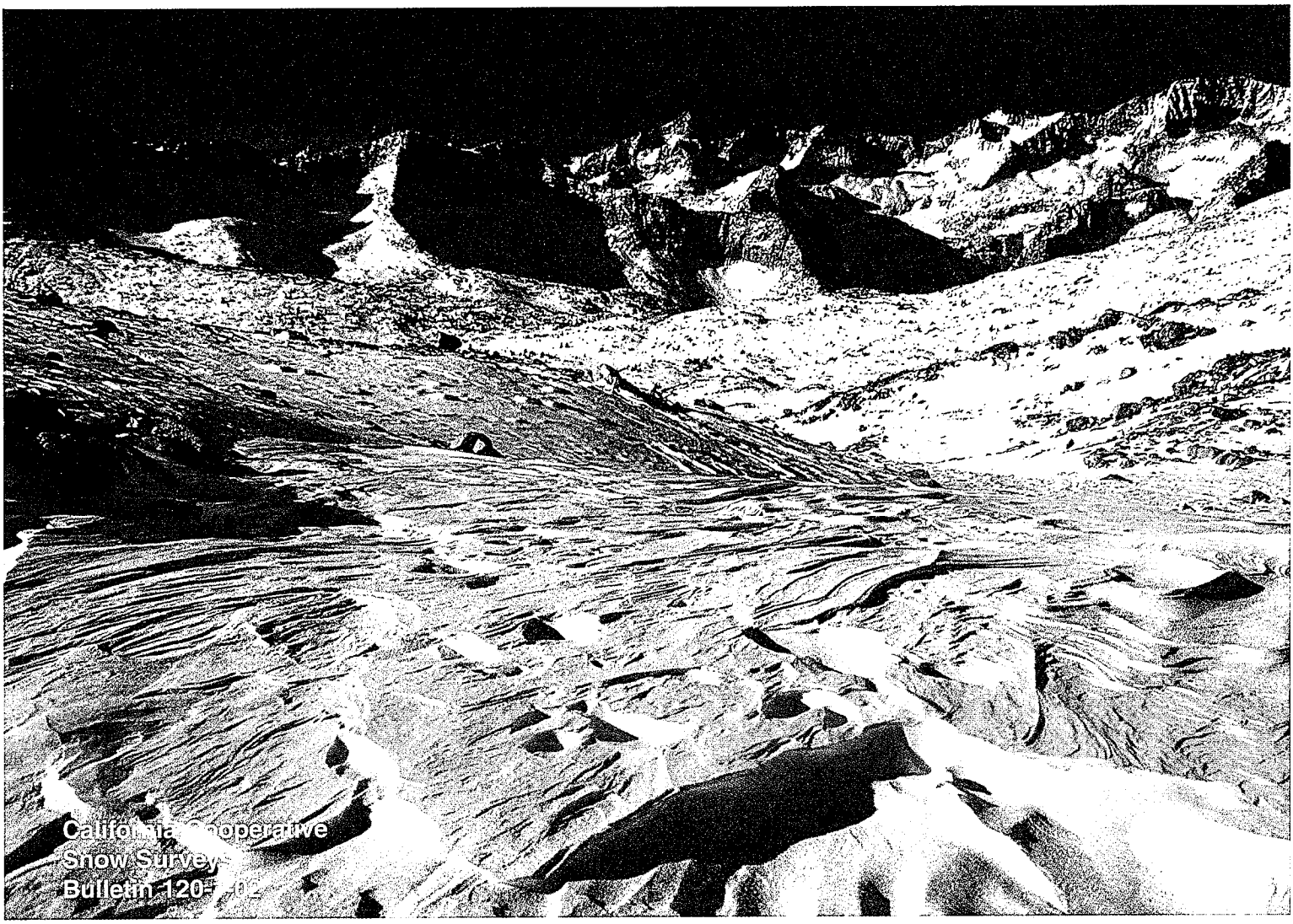

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 1 February 1, 2002

Gray Davis
Governor
State of California

Mary D. Nichols
Secretary for Resources
The Resources Agency

Thomas M. Hannigan
Director
Department of Water Resources

STATE OF CALIFORNIA
Gray Davis, Governor

THE RESOURCES AGENCY
Mary D. Nichols, Secretary for Resources

Department of Water Resources
Thomas M. Hannigan
Director

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Deputy Director

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COOPERATING AGENCIES

Public Agencies
Buena Vista Water Storage District
East Bay Municipal Utility District
Eldorado Irrigation District
Friant Water Users Association
Kaweah Delta Water Conservation District
Kern Delta Water District
Kings River Conservation District
Lower Tule River Irrigation District
Merced Irrigation District
Modesto Irrigation District
Nevada Irrigation District
North Kern Water Storage District
Northern California Power Agency
Oakdale Irrigation District
Omochumne–Hartnell Water District
Oroville–Wyandotte Irrigation District
Placer County Water Agency
Sacramento Municipal Utility District
San Joaquin Exchange Contractors Water Association
South San Joaquin Irrigation District
Tri–Dam Project
Truckee River Basin Water Commission
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency

Private Organizations
J.G. Boswell Company
Kaweah and St. Johns River Association
Kings River Water Association
Tule River Association
State Water Contractors

Municipalities
City of Bakersfield Water Department
City of Los Angeles Department of Water and Power
City and County of San Francisco Hetch Hetchy Water and Power

State Agencies
University of California
Central Sierra Snow Laboratory
Scripps Institution of Oceanography
California Department of Forestry & Fire Protection
California Department of Water Resources

Public Utilities
Pacific Gas and Electric Company
Southern California Edison Company

Federal Agencies
U.S. Department of Agriculture
Forest Service(14 National Forests)
Natural Resource Conservation Service
U.S. Department of Commerce
National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources
National Park Service(3 National Parks)
U.S. Department of Army
Corps of Engineers

Other Cooperative Programs
Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

SUMMARY OF WATER CONDITIONS

February 1, 2002

In contrast to last year, the water supply outlook this year jumped off to a good start with both November and December snowfall much above average. But the lead was eroded by a dry January, especially in the south. Although the year seems certain to be wetter than last year, it may not end up above average except in the northern part of the State. About 40 percent of the rainy season is left and the range of possible runoff outcomes is still quite large. A good sign is the recovery of overall reservoir storage to average for February 1.

Forecasts of April through July runoff are nearly average at about 95 percent overall. Water year forecasts, assuming normal weather for the remainder of the season are at 90 percent statewide. Assuming median conditions from February 1 to the end of the water year, the forecasted Sacramento River Index (SRI) will be 92 percent of average, and the Sacramento Valley Index (40−30−30 SVI) and the San Joaquin Valley Index (60−20−20 SJI) year types will be 'below normal'.

Snowpack water content is 120 percent of average for this date compared to 60 percent last year. December snow accumulation in the northern Sierra rivaled the pace set in the very wet 1983 water year. However, snowpack percentages dropped back closer to average on February 1 in all regions. The pack is about 75 percent of the April 1 average, which is the normal date of maximum accumulation.

Precipitation from October 1 to January 31 was above average statewide compared to 60 percent last year, except Southern California which has been quite dry so far. December had 140 percent of average precipitation, but January only had about half of average.

Runoff Inflow to foothill reservoirs in the Sacramento Region peaked near January 1 at rates double the highest inflows all of last water year. Northern California runoff totals rose above average in December, and despite the abrupt cutoff in precipitation, runoff was only a little below average in January. Estimated runoff of the 8 major rivers of the Sacramento and San Joaquin River regions during January was 2.7 million acre−feet.

Reservoir storage overall is average for this date due to an increase of over 5 million acre−feet since December 1. As of February 1 most major foothill reservoirs are below their maximum winter flood control limits.

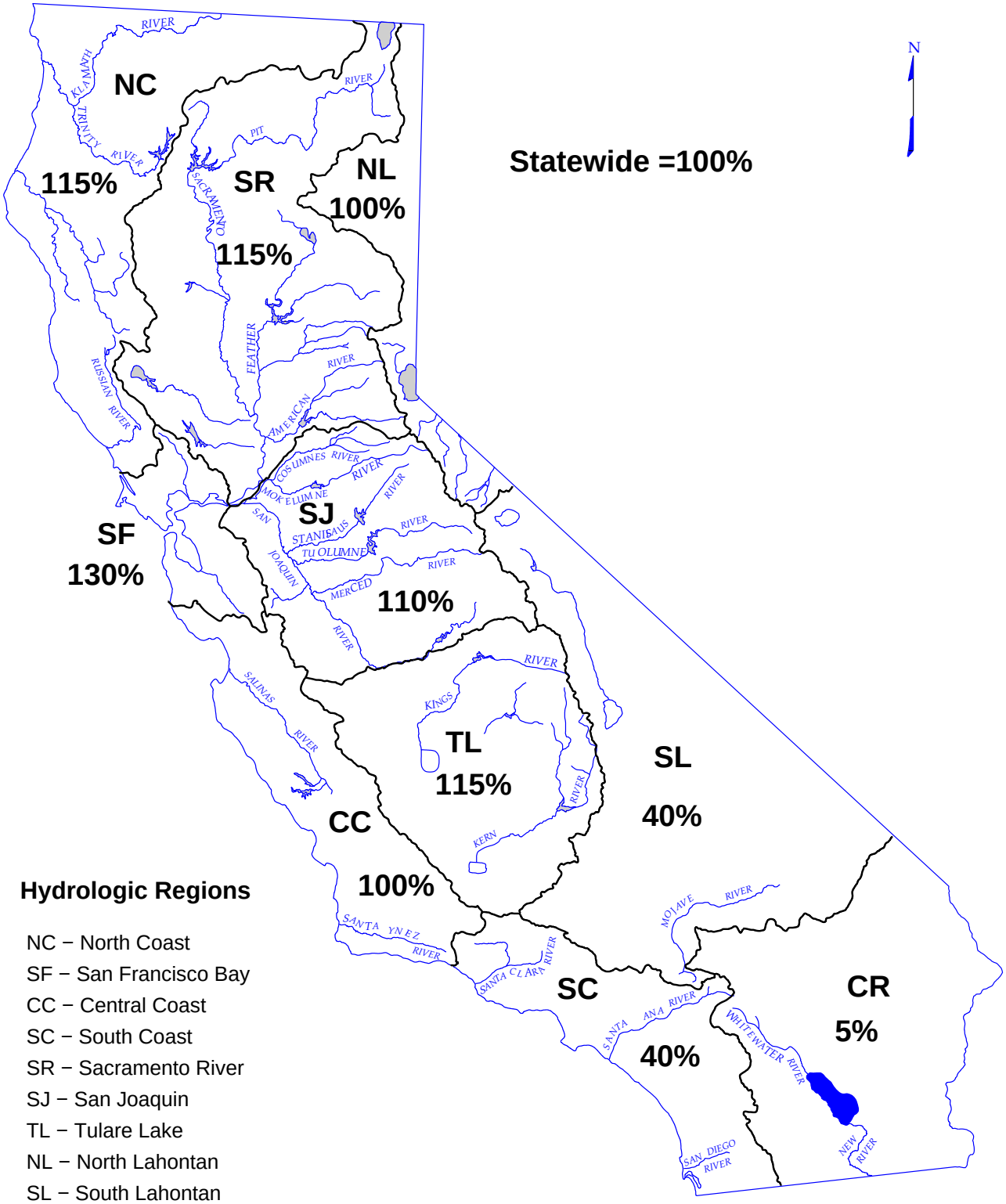
SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	FEBRUARY 1 SNOW WATER CONTENT	FEBRUARY 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR−JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	115	140	95	110	105	110
SAN FRANCISCO BAY	130	−−	105	145	−−	−−
CENTRAL COAST	100	−−	130	65	−−	−−
SOUTH COAST	40	−−	90	10	−−	−−
SACRAMENTO RIVER	115	125	100	100	90	90
SAN JOAQUIN RIVER	110	115	105	65	95	90
TULARE LAKE	115	120	85	75	90	85
NORTH LAHONTAN	100	110	60	55	90	80
SOUTH LAHONTAN	40	100	100	50	?	?
COLORADO RIVER−DESERT	5	−−	−−	−−	−−	−−
STATEWIDE	100	120	100	100	95	90

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE

October 1, 2001 through January 31, 2002



Hydrologic Regions

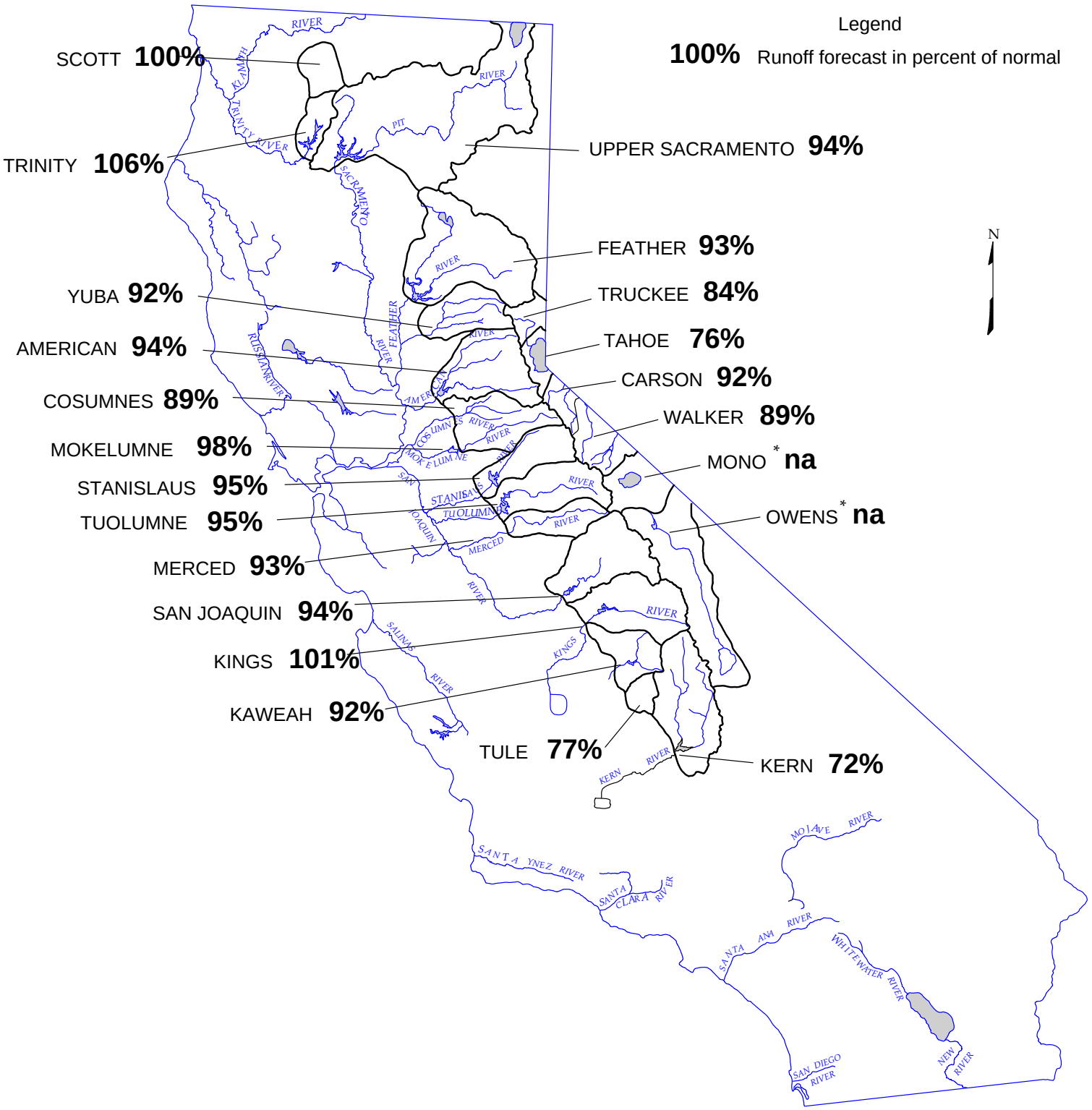
NC − North Coast
SF − San Francisco Bay
CC − Central Coast
SC − South Coast
SR − Sacramento River
SJ − San Joaquin
TL − Tulare Lake
NL − North Lahontan
SL − South Lahontan
CR − Colorado River−Desert

WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

FORECAST OF APRIL – JULY

UNIMPAIRED SNOWMELT RUNOFF

February 1, 2002



* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGLES

FEBRUARY 1, 2002 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake (3)	299	711	39	280	94%	
McCloud River above Shasta Lake	400	850	185	380	95%	
Pit River near Montgomery Creek + Squaw Creek	1,090	2,098	480	1,000	92%	
Total Inflow to Shasta Lake	1,849	3,525	726	**1,740**	94%	1,180 - 2,640
Sacramento River above Bend Bridge, near Red Bluff	2,521	5,075	943	**2,320**	92%	1,440 - 3,640
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	300	90%	
North Fork at Pulga (3)	1,028	2,416	243	950	92%	
Middle Fork near Clio (4)	86	518	4	80	93%	
South Fork at Ponderosa Dam (3)	110	267	13	100	91%	
Feather River at Oroville	1,870	4,676	392	**1,730**	93%	1,130 - 2,890
Yuba River						
North Yuba below Goodyears Bar (3)	286	647	51	260	91%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	100	89%	
South Yuba at Langs Crossing (3)	233	481	57	210	90%	
Yuba River near Smartville plus Deer Creek	1,044	2,424	200	**960**	92%	620 - 1,620
American River						
North Fork at North Fork Dam (3)	262	716	43	240	92%	
Middle Fork near Auburn (3)	522	1,406	100	490	94%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	160	92%	
American River below Folsom Lake	1,283	3,074	229	**1,200**	94%	700 - 2,100
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	130	363	8	**115**	89%	55 - 245
Mokelumne River						
North Fork near West Point (5)	437	829	104	420	96%	
Total Inflow to Pardee Reservoir	469	1,065	102	**460**	98%	320 - 730
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	310	93%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	210	94%	
Stanislaus River below Goodwin Reservoir	716	1,710	116	**680**	95%	450 - 1,090
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy (3)	322	727	97	300	93%	
Tuolumme River near Hetch Hetchy (3)	606	1,392	153	580	96%	
Tuolumne River below La Grange Reservoir	1,230	2,682	301	**1,170**	95%	820 - 1,770
Merced River						
Merced River at Pohono Bridge (3)	362	888	80	340	94%	
Merced River below Merced Falls	633	1,587	123	**590**	93%	410 - 940
San Joaquin River						
San Joaquin River at Mammoth Pool (6)	1,014	2,279	235	960	95%	
Big Creek below Huntington Lake (6)	95	264	11	90	95%	
South Fork near Florence Lake (6)	202	511	58	190	94%	
San Joaquin River below Millerton Lake	1,262	3,355	262	**1,190**	94%	790 - 1,840
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	240	100%	
Kings River below Pine Flat Reservoir	1,183	3,114	273	**1,200**	101%	760 - 1,800
Kaweah River below Terminus Reservoir	290	814	62	**265**	92%	155 - 450
Tule River below Lake Success	65	259	2	**50**	77%	26 - 110
Kern River						
Kern River near Kernville (3)	373	1,203	83	280	75%	
Kern River below Lake Isabella	470	1,657	84	**340**	72%	160 - 700

(1) See inside back cover for definition
(2) All 50 year averages are based on years 1951-2000 unless otherwise not
(3) 50 year average based on years 1941-9
(4) 44 year average based on years 1936-79
(5) 36 year average based on years 1936-7
(6) 45 year average based on years 1936-8

FEBRUARY 1, 2002 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

Unimpaired Runoff in 1,000 Acre-Feet (1)

HISTORICAL			DISTRIBUTION								FORECAST			
50 Yr Avg (2)	Max of Record	Min of Record	Oct Thru Jan*	Feb	Mar	Apr	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)	
888	1,965	165												
1,234	2,353	557												
3,217	5,150	1,484												
6,194	10,796	2,479	2,275	820	840	690	510	310	230	395	**6,070**	98%	4,840	- 8,040
8,990	17,180	3,294	3,835	1,080	1,040	920	700	430	270	475	**8,750**	97%	6,880	- 11,750
780	1,269	366												
2,417	4,400	666												
219	637	24												
291	562	32												
4,775	9,492	994	1,090	540	640	670	620	300	140	190	**4,190**	88%	3,110	- 6,230
564	1,056	102												
181	292	30												
379	565	98												
2,459	4,926	369	495	360	400	350	370	190	50	35	**2,250**	92%	1,670	- 3,310
616	1,234	66												
1,070	2,575	144												
318	705	59												
2,830	6,382	349	470	300	390	420	490	230	60	20	**2,380**	84%	1,660	- 3,720
409	1,253	20	59	50	75	60	35	15	5	1	**300**	73%	170	- 575
626	1,009	197												
774	1,800	129	85	60	80	140	210	95	15	5	**690**	89%	500	- 1,050
471	929	88												
1,196	2,952	155	145	100	130	210	250	160	60	15	**1,070**	89%	750	- 1,630
461	1,147	123												
770	1,661	258												
1,974	4,631	383	245	160	200	270	450	370	80	25	**1,800**	91%	1,310	- 2,600
461	1,020	92												
1,014	2,787	150	105	90	120	160	240	150	40	15	**920**	91%	650	- 1,430
1,337	2,964	308												
112	298	14												
248	653	71												
1,851	4,642	362	155	100	140	240	450	380	120	45	**1,630**	88%	1,130	- 2,490
284	607	58												
1,736	4,287	386	145	65	100	220	510	370	100	50	**1,560**	90%	1,040	- 2,370
460	1,402	94	60	25	45	65	100	80	20	10	**405**	88%	260	- 650
153	615	16	30	15	15	20	16	10	4	1	**111**	73%	70	- 210
558	1,577	163												
741	2,318	175	75	30	50	90	130	90	30	35	**530**	72%	280	- 1,070

* Unimpaired runoff in prior months based on measured flow

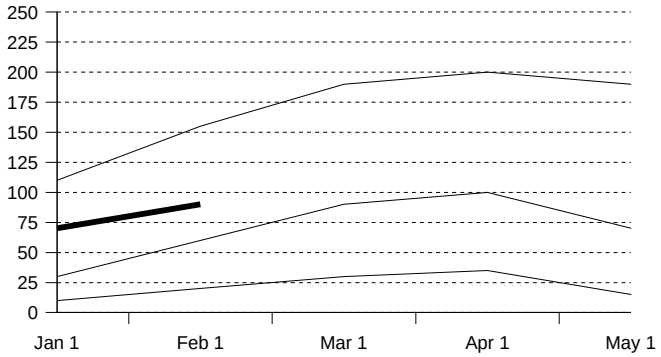
FEBRUARY 1, 2002 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Apr-Jul Forecasts	Pct of Avg
NORTH COAST					
Trinity River					
Trinity River at Lewiston Lake	660	1,593	80	**700**	106%
Scott River					
Scott River near Fort Jones	200	400	30	**200**	100%
Klamath River					
Total inflow to Upper Klamath Lake (3)	515	758	280	**505**	98%
NORTH LAHONTAN					
Truckee River					
Lake Tahoe to Farad accretions	272	713	52	**230**	84%
Lake Tahoe Rise (assuming gates closed, in feet)	1.4	5.4	0.2	**1.1**	76%
Carson River					
West Fork Carson River at Woodfords	55	135	12	**50**	90%
East Fork Carson River near Gardnerville	190	407	43	**175**	92%
Walker River					
West Walker River below Little Walker, near Coleville	153	330	35	**140**	91%
East Walker River near Bridgeport	65	209	7	**55**	84%
SOUTH LAHONTAN					
Owens River					
Total tributary flow to Owens River (4)	226	579	96	**n/a**	

(1) See inside back cover for definition
(2) All 50 year averages are based on years 1951-2000 unless otherwise not
(3) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Cer April through Septembe forecast, 30 year average based on yea 1971-2000.
(4) Forecast by Department of Water and Power, City of Los Angeles, average based on ye 1946-1995.

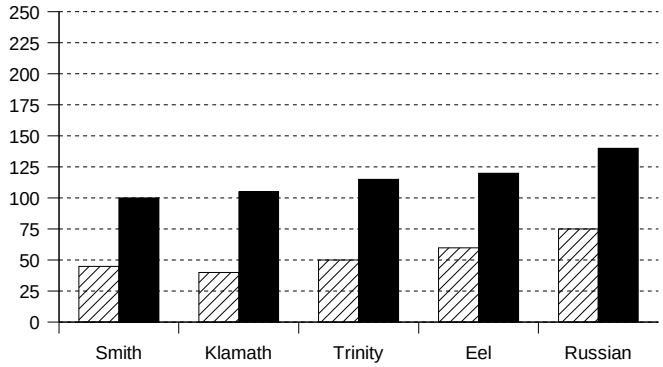
Snowpack Accumulation

Water Content in % of April 1 Average



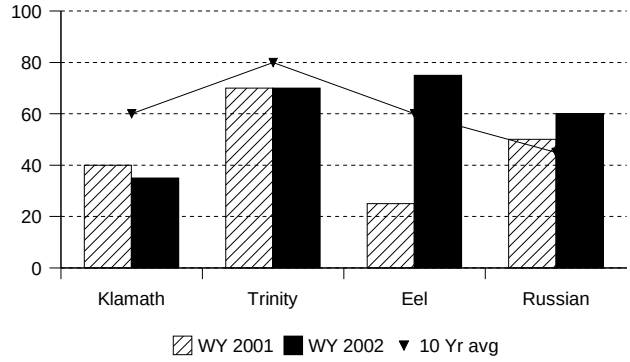
Precipitation

October 1 to date in % of Average



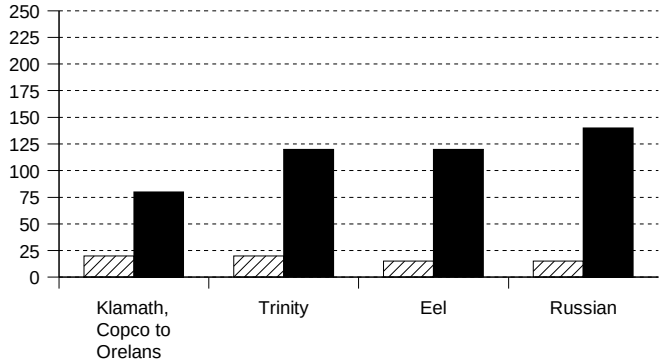
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK− First of the month measurements made at 10 snow courses indicate an area wide snow water equivalent of 24.3 inches. This is 140 percent of the February 1 average and 85 percent of the seasonal (April 1) average. Last year at this time the pack was holding 11.6 inches of water.

PRECIPITATION − Seasonal precipitation (October 1 through the end of last month) on this area was 115 percent of normal. Precipitation last month was about 80 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

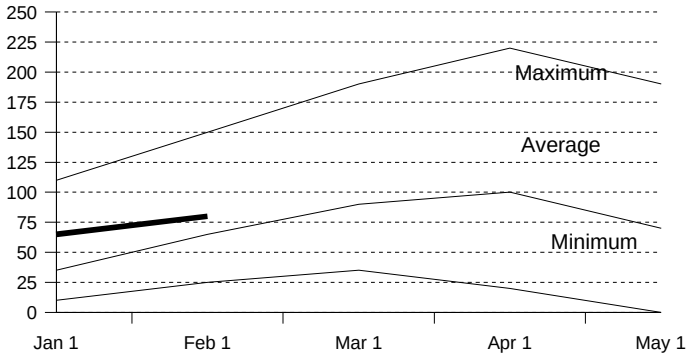
RESERVOIR STORAGE− First of the month storage in 7 reservoirs was 2.1 million acre−feet which is 95 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average.

RUNOFF −Seasonal runoff of streams draining the area totaled 6 million acre−feet which is 110 percent of the average for this period. Last year, runoff for the same period was 15 percent of average.

SACRAMENTO RIVER REGION

Snowpack Accumulation

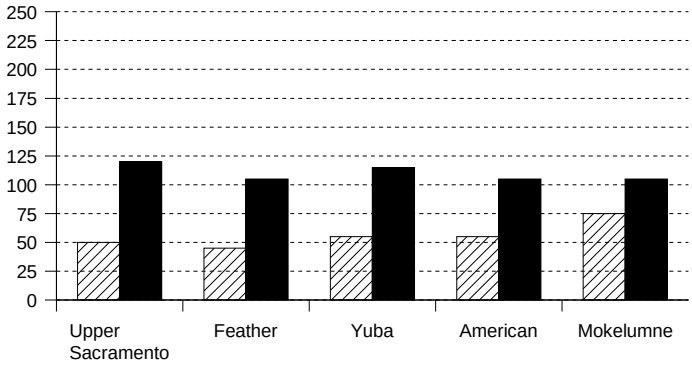
Water Content in % of April 1 Average



SNOWPACK− First of the month measurements made at 67 snow courses indicate an area wide snow water equivalent of 24.4 inches. This is 125 percent of the February 1 average and 80 percent of the seasonal (April 1) average. Last year at this time the pack was holding 11.2 inches of water.

Precipitation

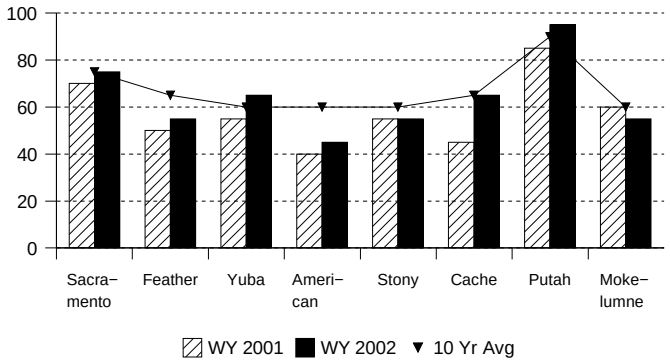
October 1 to date in % of Average



PRECIPITATION − Seasonal precipitation (October 1 through the end of last month) on this area was 115 percent of normal. Precipitation last month was about 55 percent of the monthly average. Seasonal precipitation at this time last year stood at 55 percent of normal.

Reservoir Storage

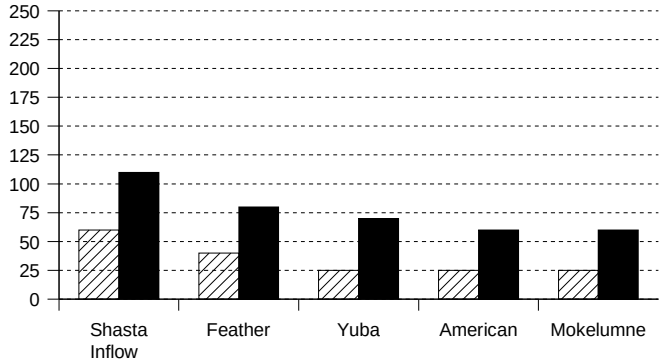
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE− First of the month storage in 43 reservoirs was 10.6 million acre−feet which is 100 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average.

Runoff

October 1 to date in % of average

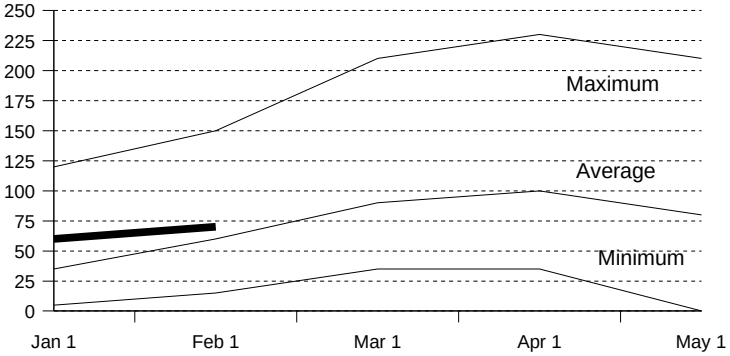


RUNOFF − Seasonal runoff of streams draining the area totaled 5.9 million acre−feet which is 100 percent of average for this period. Last year, runoff for the same period was 40 percent of average.

The **Sacramento Region 40−30−30 Water Supply Index** is forecast to be 7.4 assuming median meteorological conditions for the remainder of the year. This classifies the year as "below normal" in the Sacramento Valley according to the State Water Resources Control Board.

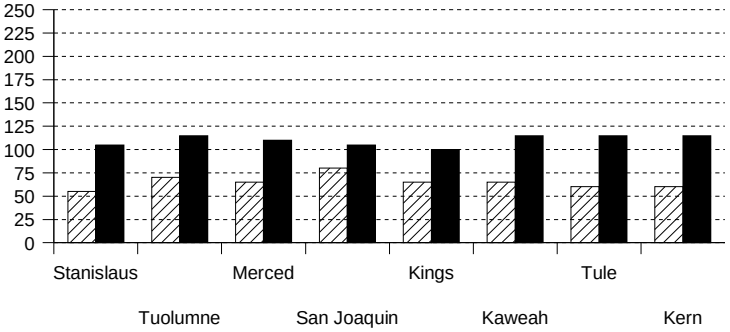
Snowpack Accumulation

Water Content in % of April 1 Average



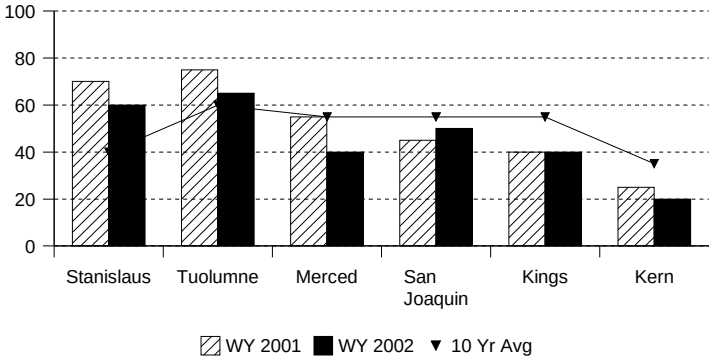
Precipitation

October 1 to date in % of Average



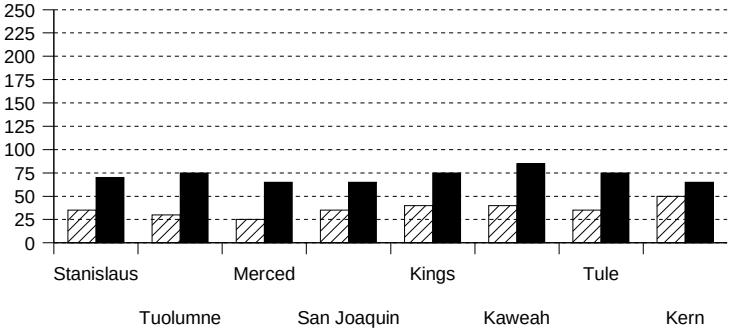
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK− First of the month measurements made at 63 **San Joaquin River Region** snow courses indicate an area wide snow water equivalent of 22.9 inches. This is 115 percent of the February 1 average and 75 percent of seasonal (April 1) average. Last year at this time the pack was holding 11.6 inches of water.
At the same time 39 **Tulare Lake Region** snow courses indicated a basin−wide snow water equivalent of 17.4 inches which is 120 percent of the average for February 1 and 70 percent of the seasonal average. Last year at this time the basin was holding 7.6 inches of water.

PRECIPITATION − Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 110 percent of normal. Precipitation last month was about 45 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.
Seasonal precipitation on the **Tulare Lake Region** was 115 percent of normal. Precipitation last month was about 45 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of normal.

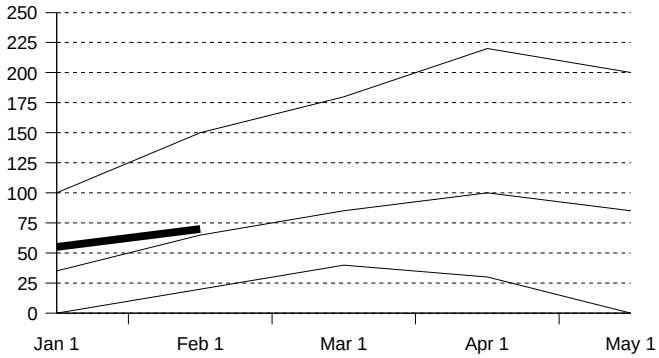
RESERVOIR STORAGE− First of the month storage in 34 **San Joaquin Region** reservoirs was 7.1 million acre−feet which is 105 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.
First of the month storage in 6 **Tulare Lake Region** reservoirs was 650 thousand acre−feet which is 85 percent of average and about 30 percent of available capacity. Storage in these reservoirs at this time last year was 85 percent of average.

RUNOFF− Seasonal runoff of streams draining the **San Joaquin Region** totaled 792 thousand acre−feet which is 65 percent of average for this period. Last year, runoff for the same period was 25 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 312 thousand acre−feet which is 75 percent of average for this period. Last year runoff for this same period was 40 percent of average.

The **San Joaquin Region 60−20−20 Water Supply Index** is forecast to be 3.0 assuming median meteorological conditions. This classifies the year as "below normal" in the San Joaquin Region according to the State Water Resources Control Board.

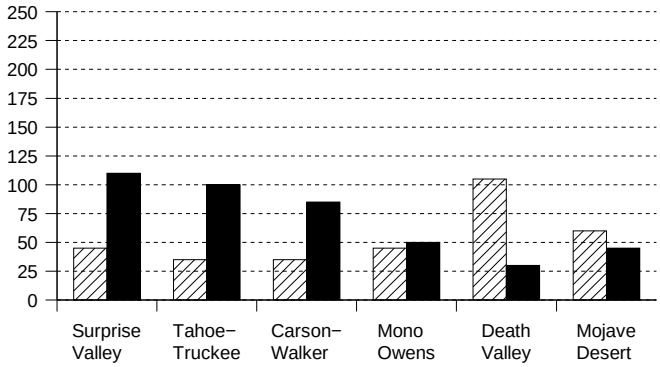
Snowpack Accumulation

Water Content in % of April 1 Average



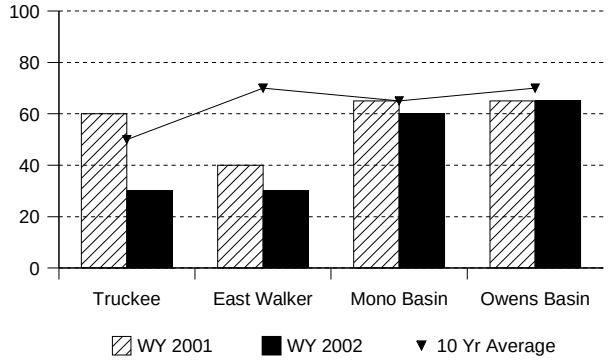
Precipitation

October 1 to date in % of Average



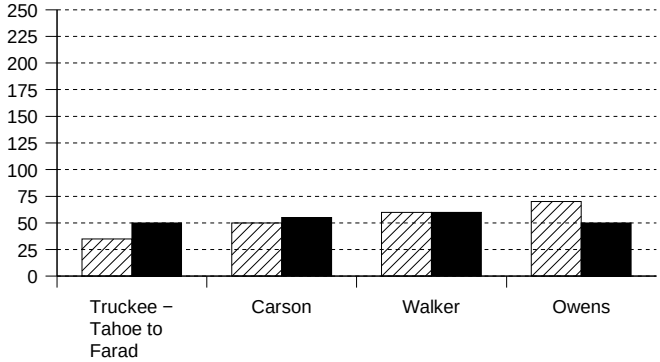
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK− First of the month measurements made at 14 **North Lahontan snow** courses indicate an area wide snow water equivalent of 16.2 inches. This is 110 percent of the February 1 average and 70 percent of seasonal (April 1) average. Last year at this time the pack was holding 7.5 inches of water. At the same time 19 **South Lahontan Region** snow courses indicated a basin−wide snow water equivalent of 12.9 inches which is 100 percent of the average for February 1 and 65 percent of the seasonal average. Last year at this time the basin was holding 5.9 inches of water.

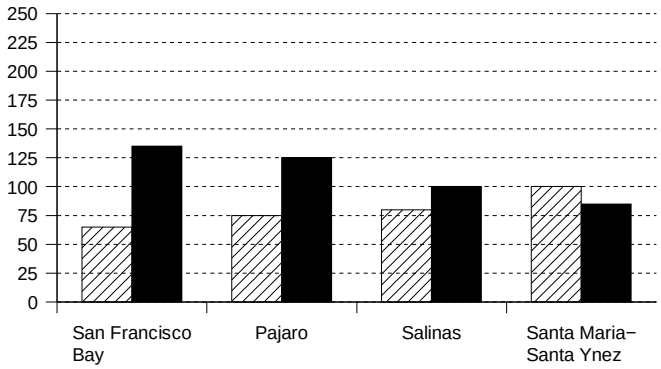
PRECIPITATION − Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 100 percent of normal. Precipitation last month was about 40 percent of the monthly average. Seasonal precipitation at this time last year stood at 40 percent of normal.
Seasonal precipitation on the **South Lahontan Region** was 40 percent of normal. Precipitation last month was about 10 percent of the monthly average. Seasonal precipitation at this time last year stood at 70 percent of normal.

RESERVOIR STORAGE− First of the month storage in 5 **North Lahontan** reservoirs was 325 thousand acre−feet which is 60 percent of average. About 30 percent of available capacity was being used. Storage in these reservoirs at this time last year was 115 percent of average. Lake Tahoe was 1.2 feet above its natural rim on February 1.
First of the month storage in 8 **South Lahontan** reservoirs was 272 thousand acre−feet which is 100 percent of average and about 70 percent of available capacity. Storage in these reservoirs at this time last year was 110 percent of average.

RUNOFF− Seasonal runoff of streams draining the **North Lahontan Region** totaled 87 thousand acre−feet which is 55 percent of average for this period. Last year, runoff for the same period was 40 percent of average.
Seasonal runoff of the Owens River in the **South Lahontan Region** totaled 22 thousand acre−feet which is 50 percent of average for this period. Last year runoff for this same period was 70 percent of average.

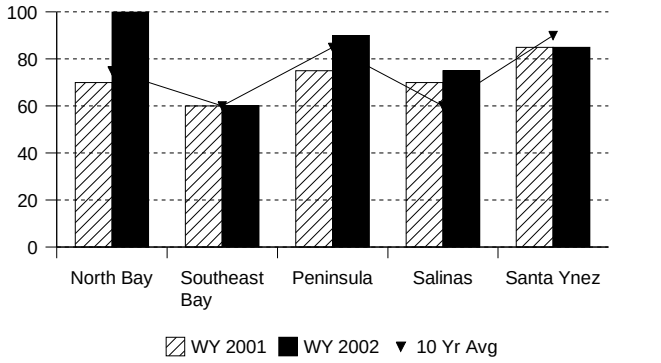
Precipitation

October 1 to date in % of Average



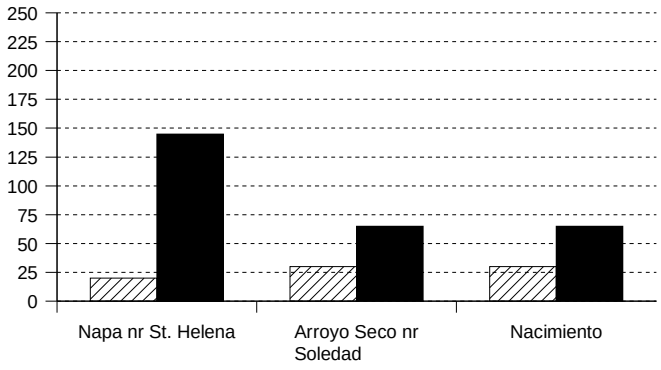
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

PRECIPITATION − Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 130 percent of normal. Precipitation last month was about 55 percent of the monthly average. Seasonal precipitation at this time last year stood at 70 percent of normal.
Seasonal precipitation on the **Central Coast Region** was 100 percent of normal. Precipitation last month was about 35 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

RESERVOIR STORAGE− First of the month storage in 18 **San Francisco Bay Region** reservoirs was 480 thousand acre−feet which is 105 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.
First of the month storage in 6 **Central Coast Region** reservoirs was 745 thousand acre−feet which is 130 percent of average and about 75 percent of available capacity. Storage in these reservoirs at this time last year was 125 percent of average.

RUNOFF− Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 52 thousand acre−feet which is 145 percent of average for this period. Last year, runoff for the same period was 20 percent of average.
Seasonal runoff of streams draining the **Central Coast Region** totaled 85 thousand acre−feet which is 65 percent of average for this period. Last year runoff for this same period was 30 percent of average.

SOUTH COAST REGION

PRECIPITATION − October through January (seasonal) precipitation on the **South Coast Region** was 40 percent of normal. January precipitation was 25 percent of the monthly average. Seasonal precipitation at this time last year was 65 percent of normal. Seasonal precipitation on the **Colorado River−Desert Region** was 10 percent of normal. Last year seasonal precipitation on the **Colorado River−Desert Region** was 65 percent of normal. Precipitation in January was about 5 percent of average.

RESERVOIR STORAGE − February 1 storage in 29 major **South Coast Region** reservoirs was 1.3 million acre−feet or 90 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average. On February 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 40 million acre−feet or about 95 percent of average. About 75 percent of available capacity was in use. Last year at this time, these reservoirs were storing 105 percent of average.

RUNOFF − Seasonal runoff from selected **South Coast Region** streams totaled about 2 thousand acre−feet which is 10 percent of average. Seasonal runoff from these streams last year was 25 percent of average.

COLORADO RIVER

The April −July inflow to Lake Powell is forecast to be 4.7 million acre−feet, which is 59 percent of average. The February 1 snowpack in the Colorado River basin above Lake Powell was 60 percent of average, highest in the Green at 80 percent and lowest in the San Juan at 40 percent.

CENTRAL VALLEY PROJECT

As of January 31, 2002 CVP storage was 8.1 million acre−feet which is the same as one year ago,and is approximately 117% of normal for that date.

The Bureau of Reclamation announced preliminary water allocations for the CVP contractors on January 25, 2002. Based on a conservative water supply forecast prepared from information available January 1, 2002, and a water year inflow into Shasta Reservoir of 4.7 million acre−feet, CVP water allocations were: Agricultural contractors North of Delta 100% and South of Delta 45%; Urban contractors North of Delta 100% and South of Delta 75%; Sacramento River water rights and San Joaquin Exchange Contractors 100%; Wildlife Refuges 100%; Friant Contractors will be 100 percent of Class 1 and 0 (zero) percent of Class 2. Initial allocations will be announced in Mid−February.

STATE WATER PROJECT

Total storage in the major SWP reservoirs was about 3.45 MAF on January 31, 2002, compared with 2.98 MAF at this time in 2001. On January 31 storage at Lake Oroville was about 1.92 MAF as compared to about 1.74 MAF last year.

The State's share of San Luis Reservoir storage at the end of January was 912 TAF, as compared to about 557 TAF at this time last year.

The combined storage of SWP's southern reservoirs was about 622 TAF on January 31 as compared to 631 TAF at this time last year.

SWP water deliveries for January 2002 were about 187 TAF. This is a combination of project, transfer, and exchange waters. This was about 77 TAF more than January 2001.

The SWP approved an initial allocation of 20% (824 TAF) on November 30, 2001. Due to wetter than average precipitation in November and December the Department increased its allocation on January 11, 2002 to 45% (1.86 MAF) for most long−term SWP contractors.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-20 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	STORAGE AT END OF January 2001 1,000 AF	2002 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
STATE WATER PROJECT						
Lake Oroville	3,538	2,441	1,737	1,916	78%	54%
San Luis Reservoir (SWP)	1,062	880	557	912	104%	86%
Lake Del Valle	77	31	25	36	118%	47%
Lake Silverwood	73	64	71	70	109%	95%
Pyramid Lake	171	163	159	163	100%	95%
Castaic Lake	324	251	304	275	109%	85%
Perris Lake	132	113	98	114	101%	87%
CENTRAL VALLEY PROJECT						
Trinity Lake	2,448	1,766	1,683	1,652	94%	68%
Lake Shasta	4,552	3,122	3,035	3,517	113%	77%
Whiskeytown Lake	241	204	211	205	100%	85%
Folsom Lake	977	514	492	481	94%	49%
New Melones Reservoir	2,420	1,358	1,874	1,569	116%	65%
Millerton Lake	520	338	289	290	86%	56%
San Luis Reservoir (CVP)	971	731	1,039	895	122%	92%
COLORADO RIVER PROJECT						
Lake Mead	26,159	20,586	22,523	19,870	97%	76%
Lake Powell	25,002	19,269	19,328	17,507	91%	70%
Lake Mohave	1,810	1,675	1,678	1,674	100%	92%
Lake Havasu	619	548	556	550	100%	89%
EAST BAY MUNICIPAL UTILITY DISTRICT						
Pardee Res	198	179	165	168	94%	85%
Camanche Reservoir	417	243	296	239	98%	57%
East Bay (4 res.)	147	127	120	127	100%	86%
CITY AND COUNTY OF SAN FRANCISCO						
Hetch-Hetchy Reservoir	360	155	201	147	95%	41%
Cherry Lake	268	120	106	210	175%	78%
Lake Eleanor	26	9	8	4	43%	16%
Souty Bay/Peninsula (4 res.)	225	161	162	148	92%	66%
CITY OF LOS ANGELES (D.W.P.)						
Lake Crowley	183	124	125	123	100%	67%
Grant Lake	48	28	42	32	112%	67%
Other Aqueduct Storage (6 res.)	83	75	68	62	83%	75%

TELEMETERED SNOW WATER EQUIVALENTS

February 1, 2002

(AVERAGES BASED ON PERIOD RECORD)

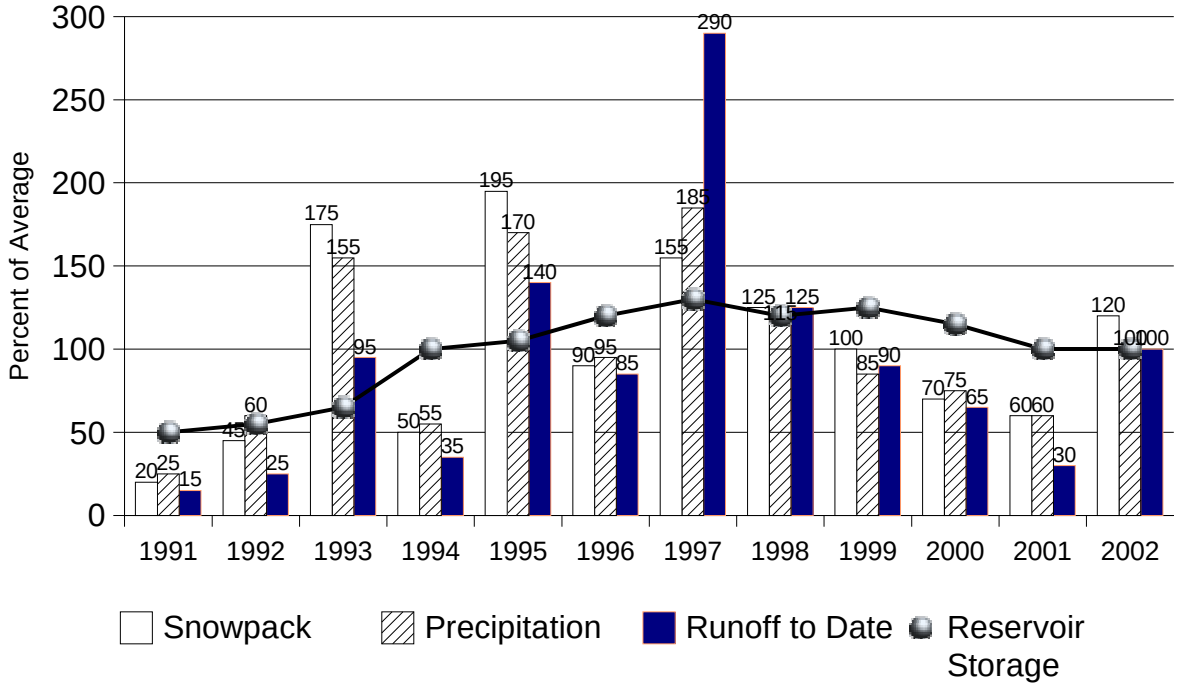
BASIN NAME / STATION NAME	ELEV	APRIL 1 AVERAGE	INCHES OF WATER EQUIVALENT Feb 1	PERCENT OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS
TRINITY RIVER						
Peterson Flat	7150’	29.2	23.2	79.5	23.2	22.6
Red Rock Mountain	6700’	39.6	—	—	—	—
Bonanza King	6450’	40.5	26.8	66.1	26.8	26.6
Shimmy Lake	6400’	40.3	—	—	—	—
Middle Boulder 3	6200’	28.3	23.8	84.1	23.8	21.8
Highland Lakes	6030’	29.9	18.4	61.4	18.4	17.4
Scott Mountain	5900’	16.0	17.1	106.6	17.1	16.8
Mumbo Basin	5650’	22.4	—	—	—	—
Big Flat	5100’	15.8	18.5	117.3	18.3	17.3
SACRAMENTO RIVER						
Cedar Pass	7100’	18.1	12.6	69.6	12.6	12.2
Blacks Mountain	7050’	12.7	3.1	24.6	3.1	3.4
Sand Flat	6750’	42.4	24.8	58.6	24.6	24.0
Medicine Lake	6700’	32.6	21.6	66.3	21.6	20.8
Adin Mountain	6200’	13.6	8.9	65.4	8.5	8.3
Snow Mountain	5950’	27.0	25.9	96.0	25.9	24.0
Slate Creek	5700’	29.0	26.4	91.0	25.9	22.1
Stouts Meadow	5400’	36.0	19.1	53.0	18.4	18.4
FEATHER RIVER						
Kettle Rock	7300’	25.5	20.3	79.5	19.8	18.4
Grizzly Ridge	6900’	29.7	20.3	68.3	20.3	18.4
Pilot Peak	6800’	52.6	16.1	30.6	15.8	13.7
Gold Lake	6750’	36.5	24.4	66.7	24.6	25.0
Humbug	6500’	28.0	25.8	92.3	25.7	25.6
Rattlesnake	6100’	14.0	18.1	129.4	18.1	15.7
Bucks Lake	5750’	44.7	33.4	74.6	33.1	29.8
Four Trees	5150’	20.0	27.7	138.6	27.7	24.5
EEL RIVER						
Noel Spring	5100’	—	6.8	—	6.8	7.0
YUBA & AMERICAN RIVERS						
Lake Lois	8600’	39.5	—	—	—	—
Schneiders	8750’	34.5	—	—	34.5	—
Caples Lake	8000’	30.9	19.4	62.9	19.4	19.9
Alpha	7600’	35.9	—	—	24.4	—
Meadow Lake	7200’	55.5	41.8	75.3	41.7	37.2
Silver Lake	7100’	22.7	18.7	82.5	18.6	17.0
Central Sierra Snow Lab	6900’	33.6	24.4	72.6	24.3	21.4
Huysink	6600’	42.6	25.7	60.3	25.7	22.9
Van Vleck	6700’	35.9	—	—	31.2	—
Robbs Saddle	5900’	21.4	—	—	17.6	—
Greek Store	5600’	21.0	21.6	102.9	21.2	19.7
Blue Canyon	5280’	9.0	—	—	—	—
Robbs Powerhouse	5150’	5.2	—	—	9.9	—
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250’	37.2	15.9	42.7	15.9	16.1
Highland Meadow	8700’	47.9	30.9	64.6	30.7	29.9
Gianelli Meadow	8400’	55.5	26.6	48.0	26.6	25.8
Lower Relief Valley	8100’	41.2	27.3	66.2	27.3	24.6
Blue Lakes	8000’	33.1	20.2	61.0	20.2	19.2
Mud Lake	7900’	44.9	—	—	36.4	—
Stanislaus Meadow	7750’	47.5	32.8	69.0	32.8	30.2
Bloods Creek	7200’	35.5	20.5	57.8	20.3	18.2
Black Springs	6500’	32.0	17.4	54.3	17.3	15.8
TUOLUMNE & MERCED RIVERS						
Dana Meadows	9800’	27.7	19.3	69.6	19.4	18.3
Slide Canyon	9200’	41.1	27.5	66.9	27.5	25.5
Lake Tenaya	8150’	33.1	23.3	70.4	23.3	22.0
Tuolumne Meadows	8600’	22.6	14.3	63.2	14.3	13.6
Horse Meadow	8400’	48.6	27.5	56.6	27.5	25.6
Ostrander Lake	8200’	34.8	20.2	58.2	20.2	19.6
Paradise Meadow	7650’	41.3	30.5	73.9	30.5	26.6
Gin Flat	7050’	34.2	15.9	46.4	15.9	14.3
Lower Kibbie Ridge	6700’	27.4	17.5	63.9	17.5	16.2

BASIN NAME		APRIL 1	INCHES OF WATER EQUIVALENT	PERCENT	24 HRS	1 WEEK
STATION NAME	ELEV	AVERAGE	Feb 1	OF AVERAGE	PREVIOUS	PREVIOUS
SAN JOAQUIN RIVER						
Volcanic Knob	10050’	30.1	20.3	67.3	20.3	18.9
Agnew Pass	9450’	32.3	18.6	57.6	18.6	16.6
Kaiser Point	9200’	37.8	21.2	56.0	21.1	19.6
Green Mountain	7900’	30.8	13.6	44.0	13.4	13.3
Tamarack Summit	7550’	30.5	16.7	54.8	16.7	14.6
Chilkoot Meadow	7150’	38.0	21.6	56.8	21.4	19.0
Huntington Lake	7000’	20.1	13.6	67.5	13.6	11.6
Graveyard Meadow	6900’	18.8	15.0	79.8	15.0	14.0
Poison Ridge	6900’	28.9	16.7	57.7	16.6	14.2
KINGS RIVER						
Bishop Pass	11200’	34.0	16.1	47.3	16.1	14.1
Charlotte Lake	10400’	27.5	27.4	99.5	27.3	24.7
State Lakes	10300’	29.0	24.0	82.8	23.9	19.9
Mitchell Meadow	9900’	32.9	23.3	70.8	23.3	21.1
Blackcap Basin	10300’	34.3	23.6	68.7	23.4	—
Upper Burnt Corral	9700’	34.6	24.7	71.4	24.7	22.7
West Woodchuck Meadow	9100’	32.8	22.8	69.5	22.6	19.1
Big Meadows	7600’	25.9	15.2	58.8	15.2	13.3
KAWEAH & TULE RIVERS						
Farewell Gap	9500’	34.5	—	—	—	—
Quaking Aspen	7200’	21.0	13.9	66.4	13.9	13.1
Giant Forest	6650’	10.0	9.2	92.0	8.9	6.4
KERN RIVER						
Upper Tyndall Creek	11400’	27.7	14.2	51.3	14.2	12.7
Crabtree Meadow	10700’	19.8	10.5	53.0	10.5	10.1
Chagoopa Plateau	10300’	21.8	11.5	52.9	11.5	11.5
Pascoes	9150’	24.9	20.4	81.9	19.8	18.0
Tunnel Guard Station	8900’	15.6	7.5	48.0	7.5	6.2
Wet Meadows	8950’	30.3	10.5	34.7	10.5	10.4
Casa Vieja Meadows	8300’	20.9	13.8	65.9	13.8	13.1
Beach Meadows	7650’	11.0	4.5	40.7	4.0	3.5
SURPRISE VALLEY AREA						
Dismal Swamp	7050’	29.2	23.2	79.5	23.2	22.9
TRUCKEE RIVER						
Mount Rose Ski Area	8900’	38.5	29.4	76.4	29.4	27.4
Independence Lake	8450’	41.4	31.9	77.1	31.9	28.4
Big Meadows	8700’	25.7	12.7	49.4	12.7	11.8
Squaw Valley	8200’	46.5	43.4	93.3	42.8	40.7
Independence Camp	7000’	21.8	13.6	62.4	13.6	10.7
Independence Creek	6500’	12.7	10.9	85.8	10.9	9.6
Truckee 2	6400’	14.3	13.1	91.6	13.1	10.3
LAKE TAHOE BASIN						
Heavenly Valley	8800’	28.1	14.7	52.3	14.7	14.4
Hagans Meadow	8000’	16.5	10.9	66.1	10.9	10.5
Marlette Lake	8000’	21.1	13.4	63.5	13.4	12.5
Echo Peak 5	7800’	39.5	34.0	86.1	34.0	34.4
Rubicon Peak 2	7500’	29.1	16.2	55.7	16.1	14.0
Tahoe City Cross	6750’	16.0	11.8	73.8	11.7	10.1
Ward Creek 3	6750’	39.4	25.2	64.0	24.9	24.3
Fallen Leaf Lake	6250’	7.0	5.8	82.9	5.8	5.7
CARSON RIVER						
Ebbetts Pass	8700’	38.8	24.0	61.9	23.8	22.2
Poison Flat	7900’	16.2	12.1	74.7	12.1	11.3
Monitor Pass	8350’	—	9.9	—	9.9	9.5
Spratt Creek	6150’	4.5	3.5	77.8	3.3	3.1
WALKER RIVER						
Leavitt Lake	9600’	—	37.8	—	37.8	35.1
Virginia Lakes	9300’	20.3	10.6	52.2	10.6	10.2
Lobdell Lake	9200’	17.3	9.6	55.5	9.6	9.4
Sonora Pass Bridge	8750’	26.0	14.4	55.4	14.4	13.4
Leavitt Meadows	7200’	8.0	6.5	81.2	6.6	6.3
OWENS RIVER/MONO LAKE						
Gem Pass	10750’	31.7	20.7	65.4	20.7	19.4
Sawmill	10200’	19.4	12.1	62.2	12.1	11.4
Cottonwood Lakes	10150’	11.6	6.2	53.1	6.0	5.9
Big Pine Creek	9800’	17.9	11.0	61.4	11.0	10.3
South Lake	9600’	16.0	9.2	57.4	9.2	7.7
Mammoth Pass	9300’	42.4	26.2	61.7	26.0	23.6
Rock Creek Lakes	10000’	14.0	8.7	62.0	8.7	8.2

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Central Valley North	45%	70%	90%	100%	75%
Central Valley South	45%	65%	85%	100%	80%
North Coast	40%	60%	85%	100%	80%

February 1 Statewide Conditions



SNOWLINES

The 2002 WESTERN SNOW CONFERENCE annual meeting will be hosted by the South Continental Region. It will be held May 20−23 near Denver, CO. We're back in the middle of things and expect a large turnout. For further information regarding the Western Snow Conference contact Frank Gehrke at 916−574−2635 or gridley@water.ca.gov.
Information is available on the web at http://snobear.colorado.edu/WSC/WSC.html.

50 year averages have been updated from the water years 1946 to 1995 to the period 1951 to 2000. Overall, the runoff and storage averages are up around 5% because of dropping the dry 1946−1950 period and adding the wet 1996 to 2000 period. You'll see these new averages in the reports and station information on the CDEC website.

Averages for monthly unimpaired runoff, monthly reservoir storage, April 1 snow course snow water content, the monthly regional pattern for snow courses and the daily regional pattern for snow sensors have also been changed. April 1 snow water content for all snow sensors and monthly precipitation averages will be updated as soon as we have completed that portion of the data review.

Most of the increased runoff and storage occurred in the winter months. Statewide, the unimpaired water year runoff for the period 1951 to 2000 is 5% higher than the 1946 to 1995 period. The increase ranges from 3% (Owens River) to 13% (Tule River). The largest increases (over 10%) occurred in the months of January and February. The runoff averages were updated for all the major forecast and statewide reporting points.

The April 1 snow water content averages are up less than 1% overall despite the wetter period, reflecting a reduction in low elevation snowpack since 1950. The new snow course averages for all courses are shown in the Measurement schedule at http://cdec.water.ca.gov/snow/misc/cooperators.html
.
Depicted on this months cover is the view from Bishop Pass. Photo and copyright by Randall Osterhuber.

SNOWPACK – Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1951–2000 (50 years, except for data sites established after 1951).

PRECIPITATION – Averages are based on April 1 data for the period 1941–1990 (50 years, except for data sites established after 1941). These averages are in the process of being updated.

RUNOFF AND FORECASTS – Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value(dry) and the 10 percent exceedence level value(wet). This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the period 1951–2000.

Reservoir storage averages are based on the period from 1951(or beginning of operation) to 2000.
For more details contact California Cooperative Snow Surveys, P.O. Box 942836, Sacramento, CA 94236–0001, (916) 574–2635 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

The Sacramento River water year unimpaired runoff is the sum of: Sacramento River above Bend Bridge, Feather River Inflow to Lake Oroville, Yuba River near Smartville and American River Inflow to Folsom Lake.

The Sacramento Valley Water Year Hydrologic Classification (40–30–30 Index). The values *40–30–30* represent the percentage weight given to the three variables in the formula for the index. The first variable is the forecasted unimpaired runoff from April through July (*40 Percent*). The second variable is the forecasted unimpaired runoff from October through March (*30 Percent*). The third variable is the previous year's index with a cap to account for required flood control releases during wet years. The basins used in this computation are those used in the Sacramento River water year unimpaired runoff.

The San Joaquin Valley Water Year Hydrologic Classification (60–20–20 Index). In a similar manner, the values *60–20–20* represents the percentage weights on April through July runoff, October through March runoff and previous year's index. The San Joaquin River unimpaired runoff is the sum of: Stanislaus River inflow to New Melones Lake, Tuolumne River Inflow to New Don Pedro Reservoir, Merced River Inflow to Lake McClure and San Joaquin River Inflow to Millerton Lake.

Runoff of the eight major rivers of the Sacramento and San Joaquin Regions is the sum of the runoff in the eight major rivers used in the two above indices.

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First Class